

# Search Request Form

Scientific and Technical Information Center

Requester's Full Name: L. Eric Crane Examiner #: 65753 Date: 08/25/02  
 Art Unit: 1623 Phone Number: 308-4639 Serial No. 10/018,466.  
 Mail Box & Bldg/Room Loc: 8D-14/CM-1 Results Format Preferred: PAPER  
[8B-19/CM-1]

If more than one search is submitted, please prioritize searches in order of need.

\*\*\*\*\*  
 Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, key words, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known. Please attach a copy of the cover sheet, pertinent claims, and/or abstract..

Title of Invention: See attached copy of claims.  
 Inventors (please provide full names): See attached copy of claims.  
 Earliest Priority Filing Date: 06/21/00

*\*For Sequence Searches only\* Please include all of the pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

**Please search for the compounds of claim 1 wherein R<sub>1</sub> is limited to -C(=O)NR<sub>5</sub>R<sub>6</sub>. Search should find the PCT priority document (WO 00/78779).**

RECEIVED  
 AUG 26 2002  
 STIC

Point of Contact:  
 Thomas G. Larson, Ph.D.  
 703-308-7309  
 CM1, Rm. 6 B 01

\*\*\*\*\*

## STAFF USE ONLY

Point of Contact:  
 Searcher: Thomas G. Larson, Ph.D.  
 Searcher Phone #: 703-308-7309  
CM1, Rm. 6 B 01  
 Searcher Location: \_\_\_\_\_  
 Date Searcher Picked Up: 8/26  
 Date Completed: 8/28  
 Searcher Prep & Review Time: \_\_\_\_\_  
 Clerical Prep Time: \_\_\_\_\_  
 Online Time: \_\_\_\_\_

## Type of Search

NA Sequence(#) \_\_\_\_\_  
 AA Sequence(#) \_\_\_\_\_  
 Structure (#) \_\_\_\_\_  
 Bibliographic \_\_\_\_\_  
 Litigation \_\_\_\_\_  
 Full Text \_\_\_\_\_  
 Patent Family \_\_\_\_\_  
 Other \_\_\_\_\_

## Vendors/cost as applicable

STN \_\_\_\_\_  
 Dialog \_\_\_\_\_  
 Questel/Orbit \_\_\_\_\_  
 Dr. Link \_\_\_\_\_  
 Lexis/Nexis \_\_\_\_\_  
 Seq.Syst'ms \_\_\_\_\_  
 WWW/Internet \_\_\_\_\_  
 Other(Specify) \_\_\_\_\_

# structure search - CAS

E. Crane; 10/018,466

Page 1

=> file hcaplus

FILE 'HCAPLUS' ENTERED AT 16:03:18 ON 28 AUG 2002

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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Point of Contact:  
Thomas G. Larson, Ph.D.  
703-308-7309  
CM1, Rm. 6 B 01

FILE COVERS 1907 - 28 Aug 2002 VOL 137 ISS 9

FILE LAST UPDATED: 26 Aug 2002 (20020826/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> d que 125

L1 1 SEA FILE=CAPLUS ABB=ON PLU=ON WO200078779/PN

L19 86848 SEA FILE=REGISTRY ABB=ON PLU=ON 16.138.1/RID AND 333.446.88/RID

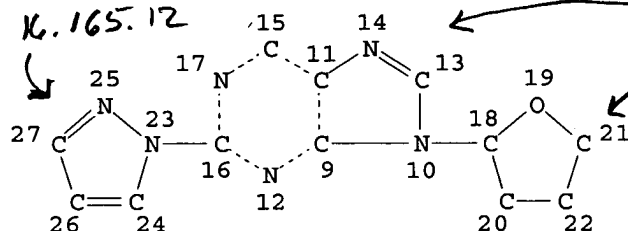
L20 53 SEA FILE=REGISTRY ABB=ON PLU=ON L19 AND 16.165.12/RID

L21 STR

Dictionary search for any structure having the three rings present in the query

RID = 16.165.12

RID = 333.446.88



Leave open to any substitution at R1

RID = 16.138.1

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 19

STEREO ATTRIBUTES: NONE

L23 17 SEA FILE=REGISTRY SUB=L20 SSS FUL L21

L24 5 SEA FILE=HCAPLUS ABB=ON PLU=ON L23

L25 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L24 NOT L1

Search subset from dictionary search in L20 with structure in L21.

Cross back to HCA

Remove NO 00/78779

=> D IBIB ABS HITSTR 1-4 125

- Display results. No

R1 = -C-N- found.

Searched by Thom Larson, STIC, 308-7309

L25 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:674877 HCAPLUS

DOCUMENT NUMBER: 136:48208

TITLE: 2-substituted PI system derivatives of adenosine that are coronary vasodilators acting via the A2A adenosine receptor

AUTHOR(S): Zablocki, J.; Palle, V.; Blackburn, B.; Elzein, E.; Nudelman, G.; Gothe, S.; Gao, Z.; Li, Z.; Meyer, S.; Belardinelli, L.

CORPORATE SOURCE: CV Therapeutics Dept. of Bioorganic Chemistry, Palo Alto, CA, USA

SOURCE: Nucleosides, Nucleotides &amp; Nucleic Acids (2001), 20(4-7), 343-360

CODEN: MNNAFY; ISSN: 1525-7770

PUBLISHER: Marcel Dekker, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB CVT-3146, 2-(N-1-(4-N-methylcarboxamidopyrazolyl)) adenosine deriv. and compd. CVT-3033, 2-(4-(1-N-pentylpyrazolyl)) adenosine deriv., were found to be short acting functionally selective coronary vasodilators (CV t0.5 = 5.2+-0.2 and 3.4+-0.5 min, resp. - rat isolated heart 50% reversal time) with good potency (EC50S = 6.4+-1.2 nM and 67.9+-16.7 nM, resp.), but they possess low affinity for the ADO A2A receptor (Ki = 1122+-323 nM and 2138+-952 nM, resp.; pig striatum).

IT 313348-16-2P

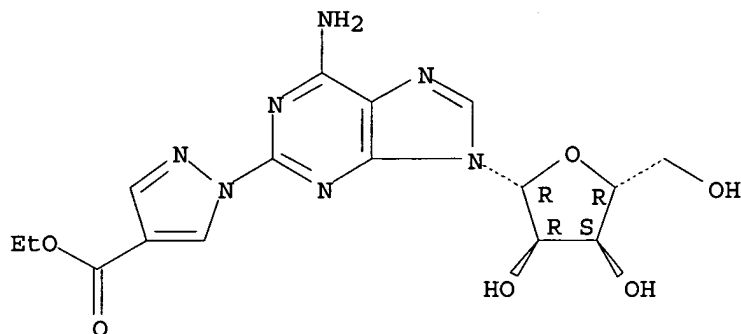
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(2-substituted PI system derivs. of adenosine as coronary vasodilators acting via A2A adenosine receptor)

RN 313348-16-2 HCAPLUS

CN 1H-Pyrazole-4-carboxylic acid, 1-(6-amino-9-.beta.-D-ribofuranosyl-9H-purin-2-yl)-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 313348-27-5P 313348-33-3P 313348-37-7P

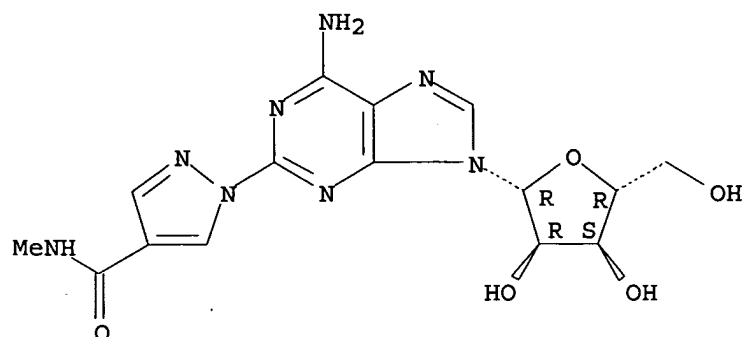
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(2-substituted PI system derivs. of adenosine as coronary vasodilators acting via A2A adenosine receptor)

RN 313348-27-5 HCAPLUS

CN Adenosine, 2-[4-[(methylamino)carbonyl]-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

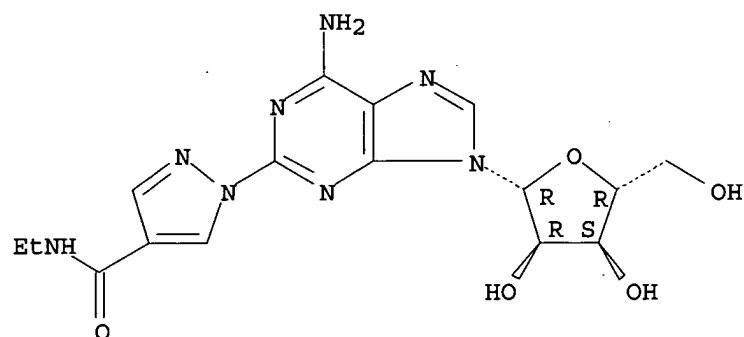
Absolute stereochemistry.



RN 313348-33-3 HCAPLUS

CN Adenosine, 2-[4-[(ethylamino)carbonyl]-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

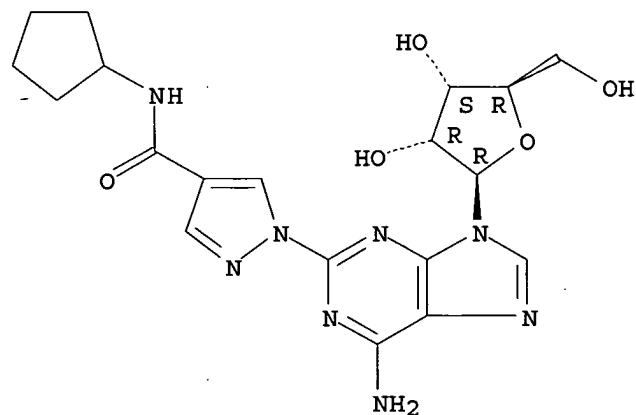
Absolute stereochemistry.



RN 313348-37-7 HCAPLUS

CN Adenosine, 2-[4-[(cyclopentylamino)carbonyl]-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



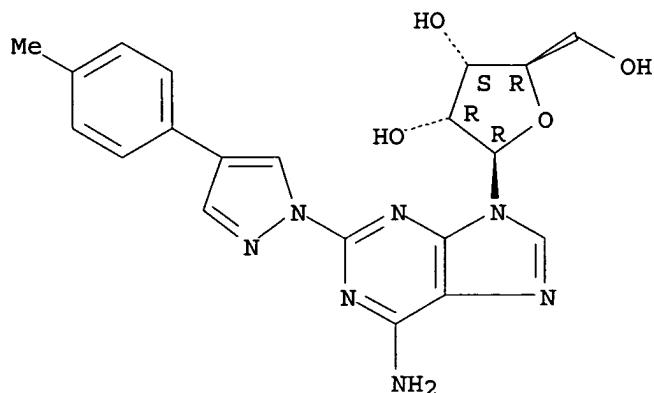
IT 313348-25-3 381689-02-7

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
(2-substituted PI system derivs. of adenosine as coronary vasodilators  
acting via A2A adenosine receptor)

RN 313348-25-3 HCAPLUS

CN Adenosine, 2-[4-(4-methylphenyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

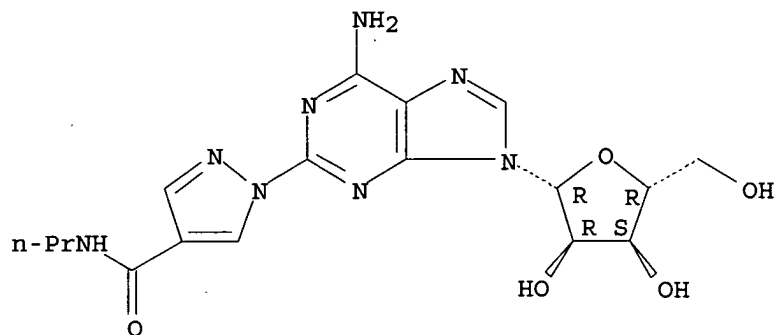
Absolute stereochemistry.



RN 381689-02-7 HCAPLUS

CN Adenosine, 2-[4-[(propylamino)carbonyl]-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:636269 HCAPLUS

DOCUMENT NUMBER: 135:190434

TITLE: Method of identifying partial agonists of the A2A receptor

INVENTOR(S): Belardinelli, Luiz; Blackburn, Brent; Gao, Zhenhai

PATENT ASSIGNEE(S): CV Therapeutics, Inc., USA

SOURCE: PCT Int. Appl., 47 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001062979	A2	20010830	WO 2001-US5831	20010223
WO 2001062979	A3	20020228		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2002012946 A1 20020131

US 2001-792617 20010223

PRIORITY APPLN. INFO.:

US 2000-184296P P 20000223

US 2000-219876P P 20000721

AB The present invention provides a method for identifying and using partial adenosine A2A receptor agonists that are useful as adjuncts in myocardial perfusion imaging. In myocardial perfusion imaging, blood flow is measured at rest and during exercise. Because many patients are unable to exercise at levels necessary to provide sufficient blood flow, a pharmacol. agent that increase CBF for a short period of time without causing peripheral vasodilation would be of benefit. We have discovered a method for identifying A2A receptor agonists that produce the desired vasodilation in the heart but do not affect the peripheral vasculature.

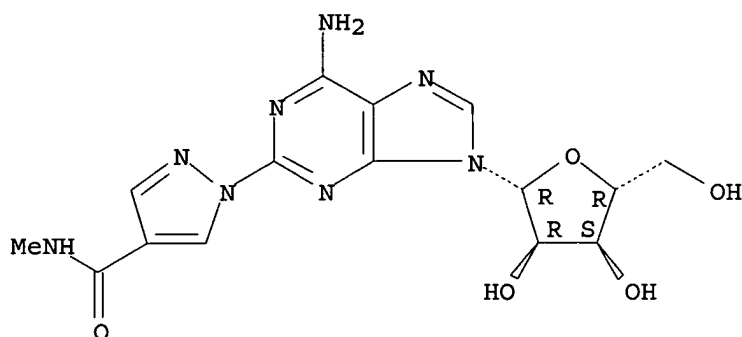
IT 313348-27-5, CVT 3146

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(method of identifying partial agonists of A2A receptor and their use in myocardial perfusion imaging)

RN 313348-27-5 HCAPLUS

CN Adenosine, 2-[4-[(methylamino)carbonyl]-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



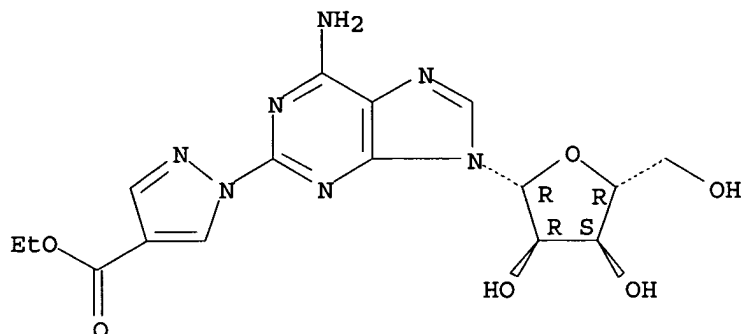
IT 313348-16-2, CVT 3127 313348-20-8 313348-25-3, CVT 3144

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
(method of identifying partial agonists of A2A receptor and their use in myocardial perfusion imaging)

RN 313348-16-2 HCAPLUS

CN 1H-Pyrazole-4-carboxylic acid, 1-(6-amino-9-.beta.-D-ribofuranosyl-9H-purin-2-yl)-, ethyl ester (9CI) (CA INDEX NAME)

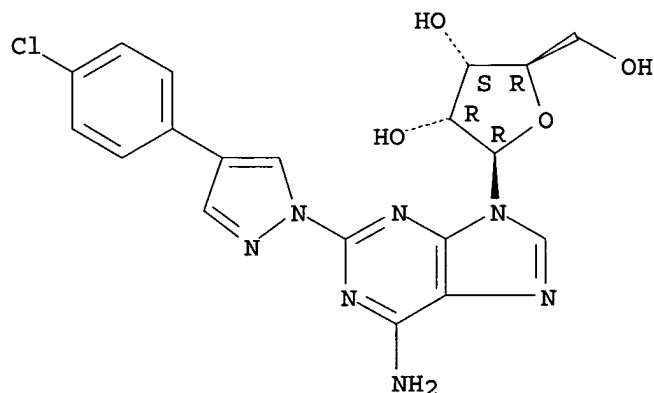
Absolute stereochemistry.



RN 313348-20-8 HCAPLUS

CN Adenosine, 2-[4-(4-chlorophenyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

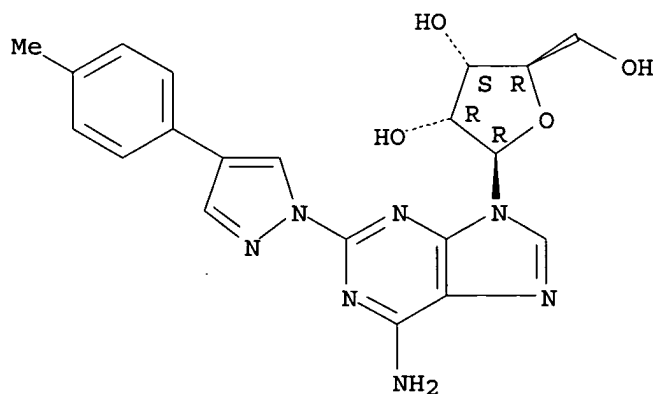
Absolute stereochemistry.



RN 313348-25-3 HCAPLUS

CN Adenosine, 2-[4-(4-methylphenyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L25 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 2001:454277 HCAPLUS  
DOCUMENT NUMBER: 135:266911  
TITLE: Novel short-acting A2A adenosine receptor agonists for coronary vasodilation: inverse relationship between affinity and duration of action of A2A agonists  
AUTHOR(S): Gao, Zhenhai; Li, Zhihe; Baker, Stephen P.; Lasley, Robert D.; Meyer, Stephanie; Elzein, Elfatih; Palle, Venkata; Zablocki, Jeff A.; Blackburn, Brent; Belardinelli, Luiz  
CORPORATE SOURCE: Departments of Pharmacological Sciences, CV Therapeutics, Palo Alto, CA, USA  
SOURCE: Journal of Pharmacology and Experimental Therapeutics (2001), 298(1), 209-218  
CODEN: JPETAB; ISSN: 0022-3565  
PUBLISHER: American Society for Pharmacology and Experimental Therapeutics  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Several potent and selective A2A adenosine receptor agonists are currently available. These compds. have a high affinity for the A2A receptor and a long duration of action. However, in situations where a short duration of action is desired, currently available A2A receptor agonists are less than ideal. From a series of recently synthesized A2A receptor agonists, two agonists (CVT-3146 and CVT-3033) with low affinity were selected for further characterization as selective and short-acting coronary vasodilators. Both compds. were selective for the A2A adenosine receptor (AdoR) vs. the A1, A2B, and A3AdoR in binding and functional studies. CVT-3146 and CVT-3033 appeared to be weak partial agonists to cause cAMP accumulation in PC12 cells, but were full and potent agonists to cause coronary vasodilation, a response that has a very large A2A receptor reserve. However, the durations of action of CVT-3146 and CVT-3033 were remarkably shorter than those of the high-affinity agonists CGS21680 or WRC0470, presumably due to the relative lower affinity of CVT-3146 and CVT-3033 for the A2A receptor. Indeed, an inverse relation was found between the affinity of the various agonists for the A2A receptor and the duration of their actions. These data indicate that low-affinity agonists can produce a response that is of equiv. magnitude but more rapid in termination than that caused by a high-affinity agonist. Hence, the low-affinity A2A agonists CVT-3146 and CVT-3033 may prove to be superior to currently available high-affinity agonists as coronary vasodilators during myocardial imaging with radionuclide agents.

IT 313348-16-2

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

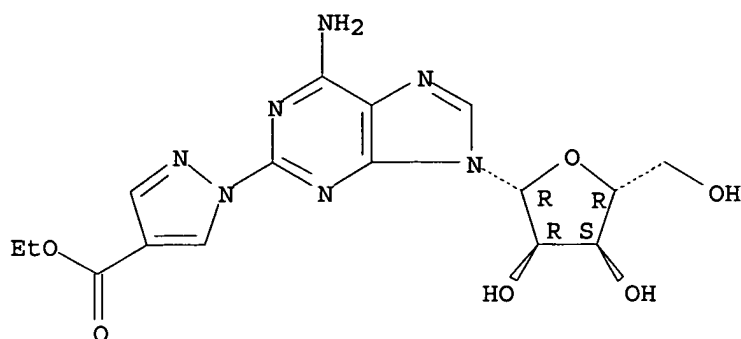
(CVT 3127; novel short-acting A2A adenosine receptor agonists for coronary vasodilation and inverse relationship between affinity and duration of action of A2A agonists in relation to cAMP accumulation)

RN 313348-16-2 HCAPLUS

CN 1H-Pyrazole-4-carboxylic acid, 1-(6-amino-9-.beta.-D-ribofuranosyl-9H-purin-2-yl)-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.





IT 313348-20-8

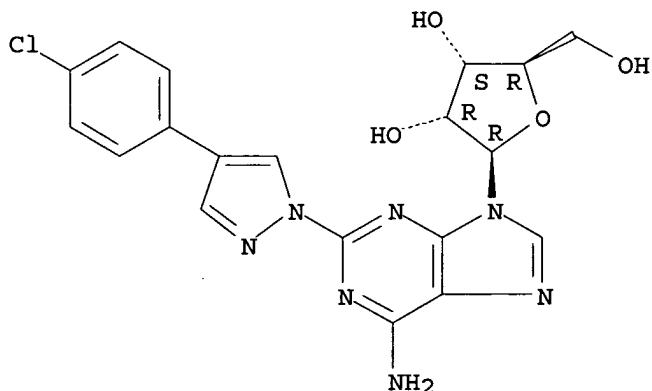
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(CVT 3141; novel short-acting A2A adenosine receptor agonists for coronary vasodilation and inverse relationship between affinity and duration of action of A2A agonists in relation to cAMP accumulation)

RN 313348-20-8 HCAPLUS

CN Adenosine, 2-[4-(4-chlorophenyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 313348-25-3

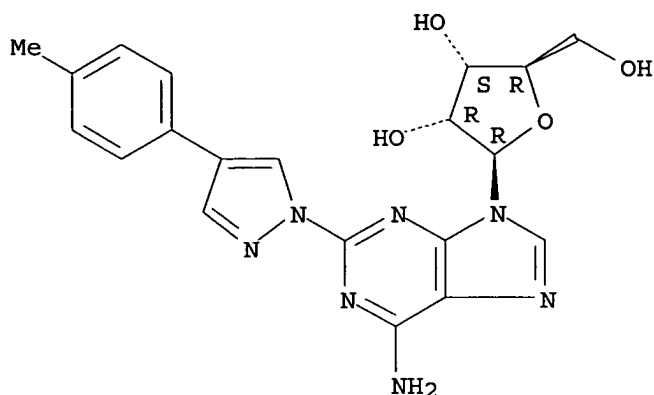
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(CVT 3144; novel short-acting A2A adenosine receptor agonists for coronary vasodilation and inverse relationship between affinity and duration of action of A2A agonists in relation to cAMP accumulation)

RN 313348-25-3 HCAPLUS

CN Adenosine, 2-[4-(4-methylphenyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 313348-27-5

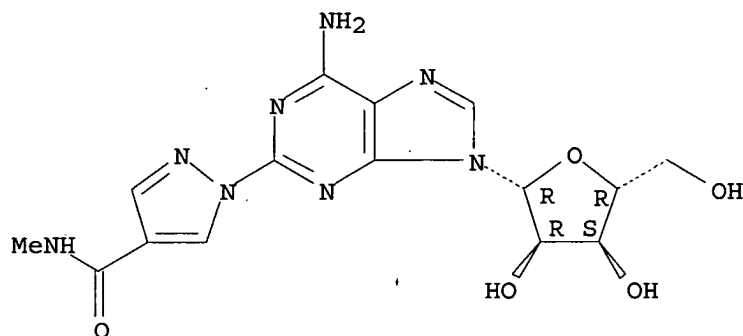
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(CVT 3146; novel short-acting A2A adenosine receptor agonists for coronary vasodilation and inverse relationship between affinity and duration of action of A2A agonists in relation to cAMP accumulation)

RN 313348-27-5 HCAPLUS

CN Adenosine, 2-[4-[(methyamino)carbonyl]-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1975:479518 HCAPLUS

DOCUMENT NUMBER: 83:79518

TITLE: Synthesis and coronary vasodilating activity of 2-substituted adenosines

AUTHOR(S): Marumoto, Ryuji; Yoshioka, Yoshio; Miyashita, Osamu; Shima, Shunsuke; Imai, Kinichi; Kawazoe, Katsuyoshi; Honjo, Mikio

CORPORATE SOURCE: Cent. Res. Div., Takeda Chem. Ind., Osaka, Japan

SOURCE: Chem. Pharm. Bull. (1975) 23(4), 759-74

CODEN: CPBTAL

DOCUMENT TYPE: Journal

LANGUAGE: English

Searched by Thom Larson, STIC, 308-7309

See P 10-1445  
by "AR"

AB 2-Haloadenosines were prepd. by acetylation of 2-haloinosines followed by chlorination and amination. 2-Alkoxyadenosines were prepd. by protection of 2'- and 3'-OH groups of 2-chloroadenosine (I) or 2-chloroinosine, followed by substitution of the C atom with alkoxy group. The reaction of 5-amino-4-cyano-1-.beta.-D-ribofuranosylimidazole with CS<sub>2</sub> afforded 2,6-di-mercapto-9-.beta.-D-ribofuranosylpurine, which was converted to 2-mercaptoadenosine and its S-substituted derivs. 2-Phenylaminoadenosine (II) was prepd. from 2-phenylamino-2',3',5'-tri-O-acetylinosine, which was prepd. by acetylation of 2-phenylaminoinosine with AcCl in HOAc. O-substituted 2-hydroxyadenosines, S-substituted 2-mercaptoadenosines, N2-substituted 2-aminoadenosines, 2-alkyl- and -aryl-adenosines were prepd. among which several compds. had coronary vasodilating potency. II showed not only a strong potency, but also a longer duration of the effect than that of I.

IT 56720-68-4 56720-69-5

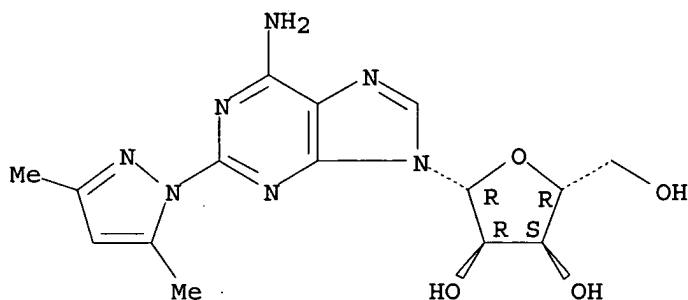
RL: RCT (Reactant)

(coronary vasodilating activity of)

RN 56720-68-4 HCAPLUS

CN Adenosine, 2-(3,5-dimethyl-1H-pyrazol-1-yl)- (9CI) (CA INDEX NAME)

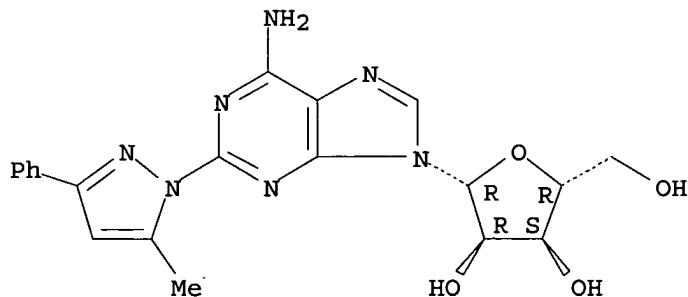
Absolute stereochemistry.



RN 56720-69-5 HCAPLUS

CN Adenosine, 2-(5-methyl-3-phenyl-1H-pyrazol-1-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.





E. Crane; 10/018,466

Page 2

L28

0 SEA FILE=BEILSTEIN SSS FUL L14

No hits

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L1 1 SEA FILE=CAPLUS ABB=ON PLU=ON WO200078779/PN  
 L16 22 SEA FILE=REGISTRY ABB=ON PLU=ON (1003-03-8/BI OR 104-86-9/BI OR 15763-11-8/BI OR 205676-17-1/BI OR 27956-35-0/BI OR 313348-16-2/BI OR 313348-20-8/BI OR 313348-22-0/BI OR 313348-25-3/BI OR 313348-27-5/BI OR 313348-29-7/BI OR 313348-31-1/BI OR 313348-33-3/BI OR 313348-35-5/BI OR 313348-37-7/BI OR 313348-39-9/BI OR 313348-41-3/BI OR 313348-43-5/BI OR 313348-45-7/BI OR 616-34-2/BI OR 65192-28-1/BI OR 80370-42-9/BI)  
 L18 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L1 AND L16

Extract  
 Registry  
 Numbers  
 and cross  
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 CAPLUS to  
 get structures  
 to display.

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L18 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:911270 HCAPLUS

DOCUMENT NUMBER: 134:56921

TITLE: Preparation of nucleoside N-pyrazole as adenosine A2a receptor agonists for purposes of imaging the heart

INVENTOR(S): Zablocki, Jeff A.; Elzein, Elfatih O.; Palle, Venkata

PATENT ASSIGNEE(S): CV Therapeutics, Inc., USA

SOURCE: PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

Also Appl. int's own work

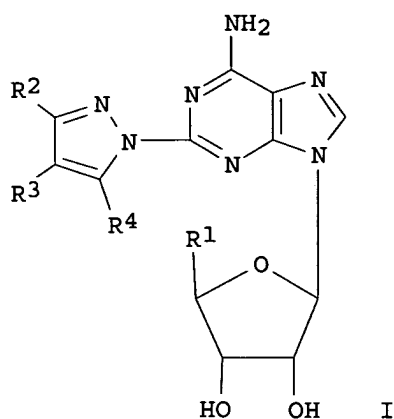
Point of Contact:  
 Thomas G. Larson, Ph.D.  
 703-308-7309  
 CM1, Rm. 6 B 01

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000078779	A2	20001228	WO 2000-US40281	20000621 <--
WO 2000078779	A3	20010315		
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 6403567	B1	20020611	US 1999-338185	19990622
EP 1189916	A2	20020327	EP 2000-960112	20000621
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
NO 2001006350	A	20020218	NO 2001-6350	20011221
PRIORITY APPLN. INFO.:			US 1999-338185	A 19990622
			WO 2000-US40281	W 20000621

OTHER SOURCE(S): MARPAT 134:56921

GI

\* [ Eric, WO 00/78779 didn't turn up in the search because a structure where R' = O=C-N is not indexed - see attached hit structures.



AB 2-Adenosine N-pyrazole compds. I wherein R1 is CH<sub>2</sub>OH, amide, R2 and R4 are H, alkyl, aryl, R3 is alkyl, halo, NO<sub>2</sub>, CN, ether, thio ether, amine, sulfone, sulfonamide, ester, and methods for using the compds. as A<sub>2</sub>A receptor agonists to stimulate mammalian coronary vasodilatation for therapeutic purposes and for purposes of imaging the heart. Thus, I (R1 = OH, R2 = R4 = H, R3 = CO<sub>2</sub>Et) was prepd. its affinity for the adenosine A<sub>2</sub>a receptor (K<sub>i</sub> = 10-1000 nM), is reported.

IT 313348-16-2P

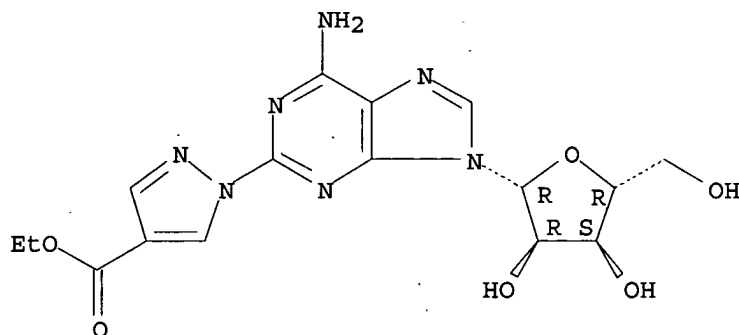
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of nucleoside N-pyrazole as adenosine A<sub>2</sub>a receptor agonists for purposes of imaging the heart)

RN 313348-16-2 HCAPLUS

CN 1H-Pyrazole-4-carboxylic acid, 1-(6-amino-9-.beta.-D-ribofuranosyl-9H-purin-2-yl)-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 313348-20-8P 313348-22-0P 313348-25-3P  
 313348-27-5P 313348-29-7P 313348-31-1P  
 313348-33-3P 313348-35-5P 313348-37-7P  
 313348-41-3P 313348-43-5P

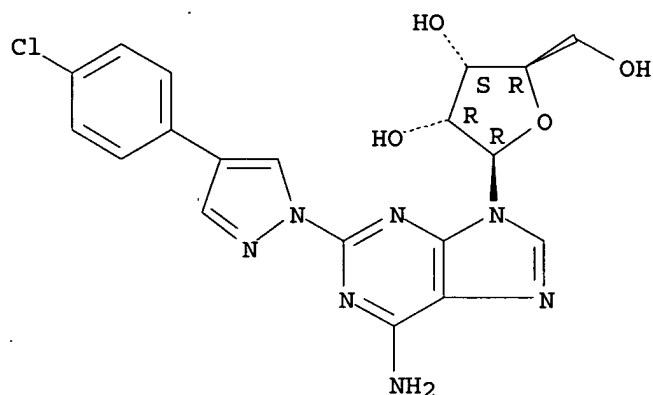
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of nucleoside N-pyrazole as adenosine A2a receptor agonists for purposes of imaging the heart)

RN 313348-20-8 HCAPLUS

CN Adenosine, 2-[4-(4-chlorophenyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

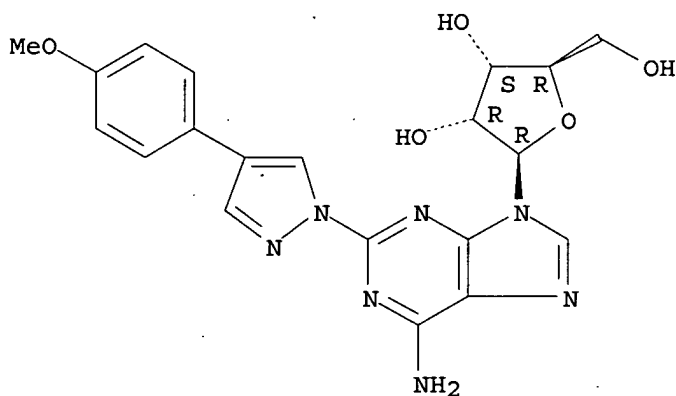
Absolute stereochemistry.



RN 313348-22-0 HCAPLUS

CN Adenosine, 2-[4-(4-methoxyphenyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

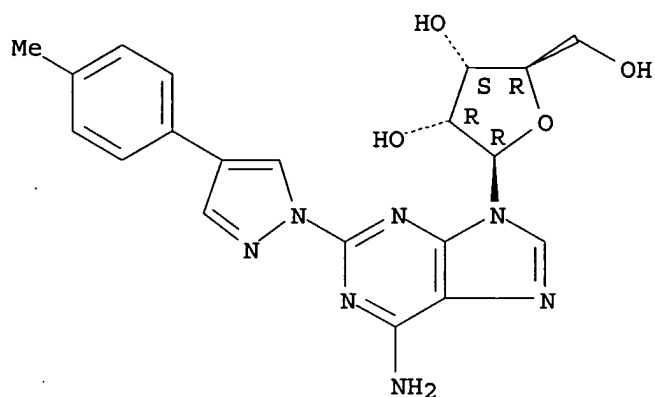


RN 313348-25-3 HCAPLUS

CN Adenosine, 2-[4-(4-methylphenyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

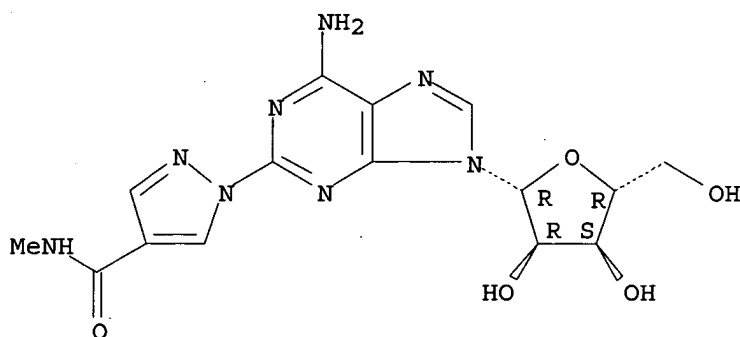




RN 313348-27-5 HCAPLUS

CN Adenosine, 2-[4-[(methyamino)carbonyl]-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

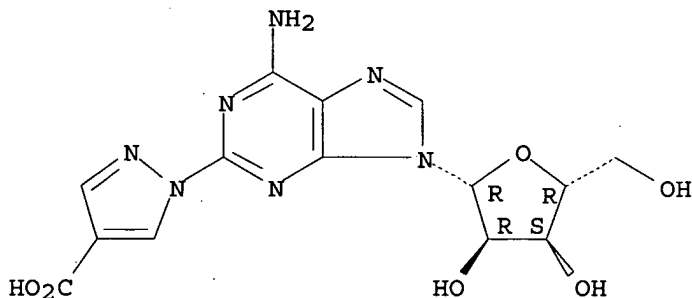
Absolute stereochemistry.



RN 313348-29-7 HCAPLUS

CN 1H-Pyrazole-4-carboxylic acid, 1-(6-amino-9-.beta.-D-ribofuranosyl-9H-purin-2-yl)- (9CI) (CA INDEX NAME)

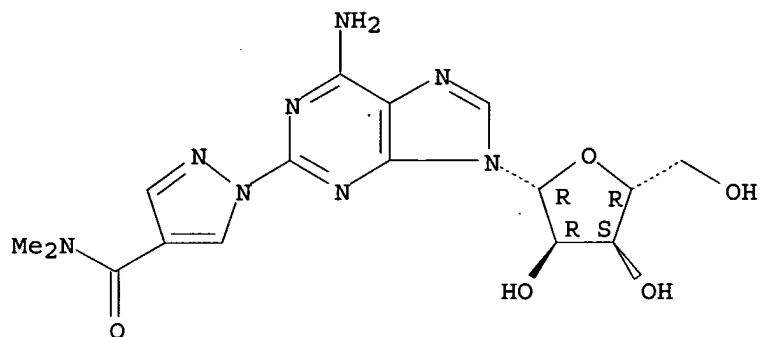
Absolute stereochemistry.



RN 313348-31-1 HCAPLUS

CN Adenosine, 2-[4-[(dimethylamino)carbonyl]-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

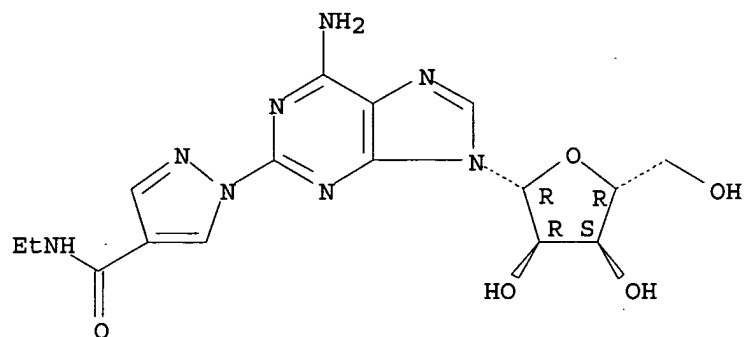
Absolute stereochemistry.



RN 313348-33-3 HCAPLUS

CN Adenosine, 2-[4-[(ethylamino)carbonyl]-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

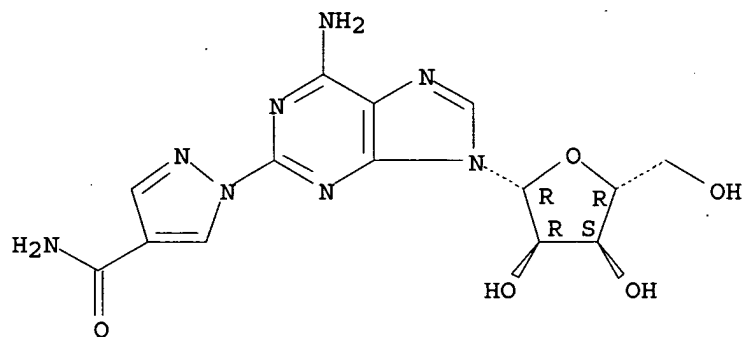
Absolute stereochemistry.



RN 313348-35-5 HCAPLUS

CN Adenosine, 2-[4-(aminocarbonyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

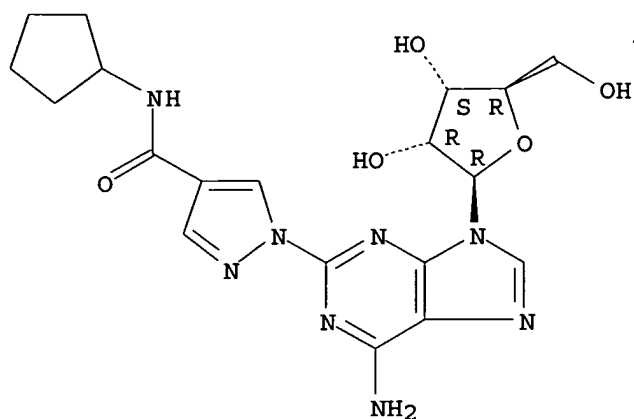
Absolute stereochemistry.



RN 313348-37-7 HCAPLUS

CN Adenosine, 2-[4-[(cyclopentylamino)carbonyl]-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

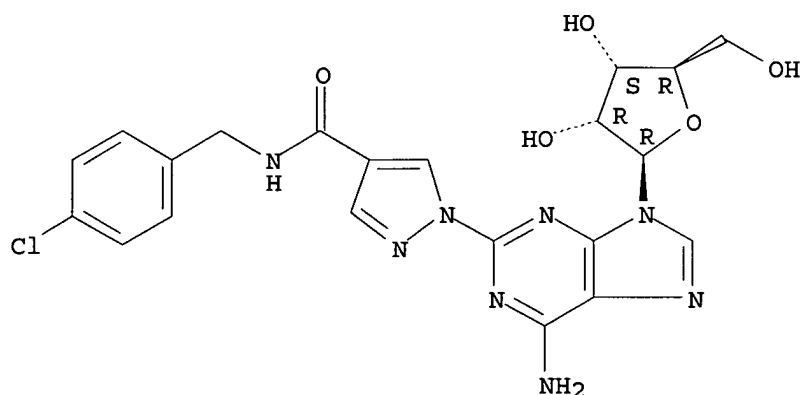
Absolute stereochemistry.



RN 313348-41-3 HCAPLUS

CN Adenosine, 2-[4-[[[(4-chlorophenyl)methyl]amino]carbonyl]-1H-pyrazol-1-yl]-  
(9CI) (CA INDEX NAME)

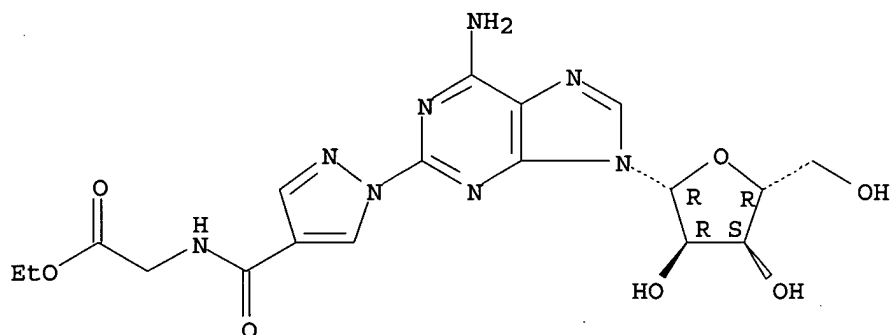
Absolute stereochemistry.



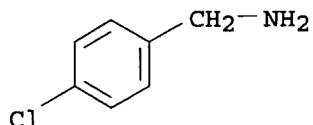
RN 313348-43-5 HCAPLUS

CN Glycine, N-[[1-(6-amino-9-.beta.-D-ribofuranosyl-9H-purin-2-yl)-1H-pyrazol-  
4-yl]carbonyl]-, ethyl ester (9CI) (CA INDEX NAME)

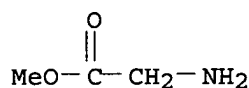
Absolute stereochemistry.



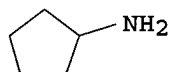
IT 104-86-9, 4-Chlorobenzylamine 616-34-2, Glycine methyl ester 1003-03-8, Cyclopentylamine 15763-11-8  
27956-35-0, 2-(4-Methyl)phenylmalondialdehyde 65192-28-1  
80370-42-9 205676-17-1, 2-(4-Chloro)phenylmalondialdehyde 313348-45-7  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(prepn. of nucleoside N-pyrazole as adenosine A2a receptor agonists for purposes of imaging the heart)  
RN 104-86-9 HCAPLUS  
CN Benzenemethanamine, 4-chloro- (9CI) (CA INDEX NAME)



RN 616-34-2 HCAPLUS  
CN Glycine, methyl ester (6CI, 8CI, 9CI) (CA INDEX NAME)

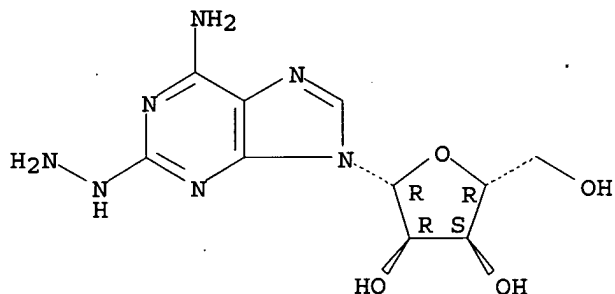


RN 1003-03-8 HCAPLUS  
CN Cyclopentanamine (9CI) (CA INDEX NAME)

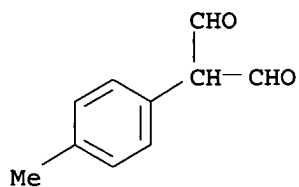


RN 15763-11-8 HCAPLUS  
CN Adenosine, 2-hydrazino- (6CI, 8CI, 9CI) (CA INDEX NAME)

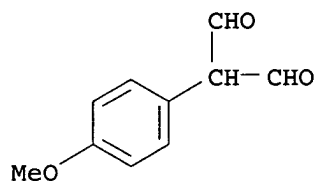
Absolute stereochemistry.



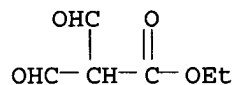
RN 27956-35-0 HCAPLUS  
CN Propanedial, (4-methylphenyl)- (9CI) (CA INDEX NAME)



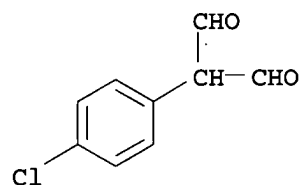
RN 65192-28-1 HCAPLUS  
 CN Propanedial, (4-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 80370-42-9 HCAPLUS  
 CN Propanoic acid, 2-formyl-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

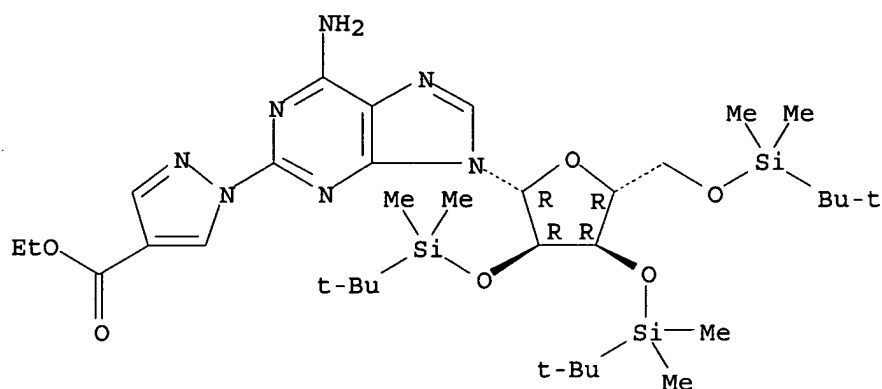


RN 205676-17-1 HCAPLUS  
 CN Propanedial, (4-chlorophenyl)- (9CI) (CA INDEX NAME)



RN 313348-45-7 HCAPLUS  
 CN 1H-Pyrazole-4-carboxylic acid, 1-[6-amino-9-[2,3,5-tris-O-[(1,1-dimethylethyl)dimethylsilyl]-.beta.-D-ribofuranosyl]-9H-purin-2-yl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 313348-39-9P

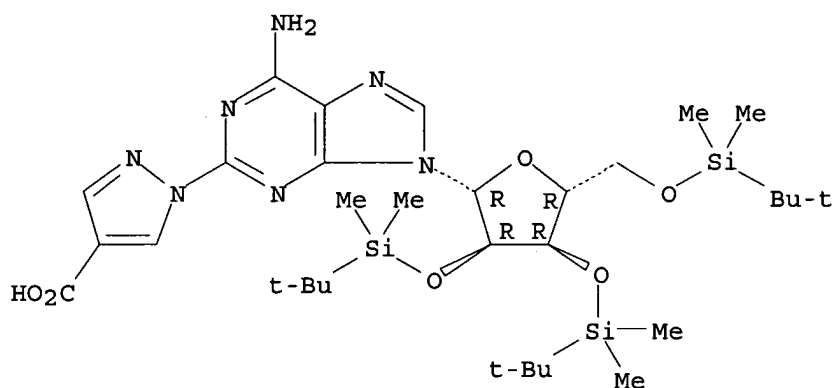
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of nucleoside N-pyrazole as adenosine A2a receptor agonists for purposes of imaging the heart)

RN 313348-39-9 HCAPLUS

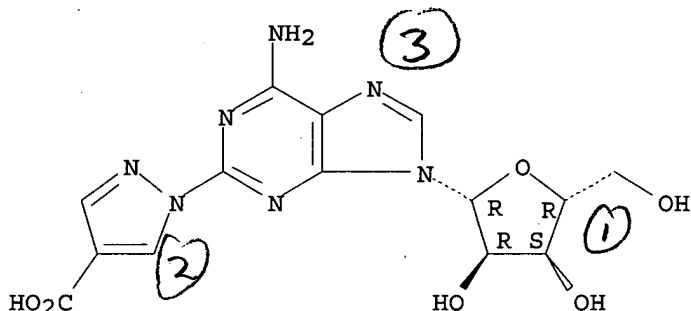
CN 1H-Pyrazole-4-carboxylic acid, 1-[6-amino-9-[2,3,5-tris-O-[(1,1-dimethylethyl)dimethylsilyl]-.beta.-D-ribofuranosyl]-9H-purin-2-yl]- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



L9 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS  
 RN 313348-29-7 REGISTRY  
 CN 1H-Pyrazole-4-carboxylic acid, 1-(6-amino-9-.beta.-D-ribofuranosyl-9H-  
 purin-2-yl)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C14 H15 N7 O6  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

=> d rsd

L9 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS

Ring System Data

Elemental Analysis EA	Elemental Sequence ES	Size of the Rings SZ	Ring System Formula RF	Ring Identifier RID	RID Occurrence Count
C4O	OC4	5	C4O	16.138.1	1
C3N2	N2C3	5	C3N2	16.165.12	1
C3N2-C4N2	NCNC2-NCNC3	5-6	C5N4	333.446.88	1